



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/760,235	01/21/2004	Kia Silverbrook	MPA22US	2179
24011	7590	08/17/2006	EXAMINER	
SILVERBROOK RESEARCH PTY LTD 393 DARLING STREET BALMAIN, NSW 2041 AUSTRALIA			HSIEH, SHIH WEN	
			ART UNIT	PAPER NUMBER
			2861	

DATE MAILED: 08/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/760,235	Applicant(s) SILVERBROOK ET AL.	
	Examiner Shih-wen Hsieh	Art Unit 2861	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Amendment

Terminal Disclaimer

1. The terminal disclaimer filed on May 30, 2006 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of co-pending 10/760,194 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-3 and 5 are rejected under 35 U.S.C. 102(e) as being anticipated by Silverbrook (US Pat. No. 7,021,843).

The applied reference has a common inventor with the instant application.

Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome

Art Unit: 2861

either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

In regard to:

Claim 1:

Silverbrook teaches:

A print head system (56, fig. 11), comprising:

at least one print head module (54, fig. 11) comprising at least two print head integrated circuits (112, figs. 11 and 13), each of which has nozzles formed therein for delivering printing fluid onto a surface of print media (48, fig. 11), a support member (118, figs. 11, 13 and 14) supporting and carrying the printing fluid for the at least two print head integrated circuits (refer to col. 12, line 65 to col. 13, line 3 and col. 13, lines 21-23), and at least two electrical connectors (PCBs 108 and 110, fig. 14 and col. 12, lines 51-64) for connecting electrical signals to the respective ones of the at least two print head integrated circuits;

drive electronics (126, fig. 14) incorporating at least one controller for controlling the printing operation of at least one of the at least two print head integrated circuits, refer to col. 13, lines 9-12; and

a casing (100 and 102, figs. 9-11) in which the at least one print head module and the drive electronics are removably mounted, refer to col. 12, lines 31-35,

wherein each of the at least two electrical connectors is arranged to direct control signals from the at least one controller to the corresponding printhead integrated circuit

and to direct power from a power supply (66, fig. 9) to the corresponding printhead integrated circuit and the drive electronics, refer to col. 12, lines 3-6; and col. 12, lines 55-64; and col. 13, lines 5-12.

Claim 2:

Silverbrook further teaches:

wherein the at least two electrical connectors (PCBs 108 and 110) each comprise a flexible printed circuit board (114, fig. 14) connected to respective ones of the at least two print head integrated circuits, refer to col. 12, lines 55-64.

Claim 3:

Silverbrook further teaches:

wherein the drive electronics (126, fig. 14) is provided on a printed circuit board (108 or 110, fig. 14) carrying respective connection ports which are directly aligned with and connected to the respective flexible printed circuit boards (114) and print head integrated circuits, refer to col. 12, lines 55-64.

Claim 5:

Silverbrook further teaches:

the at least one print head module (54) is formed as a unitary arrangement of the at least two print head integrated circuits (112), the support member (118), the at least two electrical connectors (108 and 110), and at least one fluid distribution member (120, figs. 13 and 14) mounting the at least two print head integrated circuits (112) to the support member; and

the support member has at least one longitudinally extending channel for carrying the printing fluid for the print head integrated circuits and includes a plurality of apertures extending through a wall of the support member arranged so as to direct the printing fluid from the at least one channel to associated nozzles in both, or if more than two, all of the print head integrated circuits by way of respective ones of the fluid distribution members, refer to col. 13, lines 60-67 and fig. 14 for the support member and the ink inlet.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 4 is rejected under 35 U.S.C. 103(a) as being obvious over Silverbrook (US pat. No. 7,021,843).

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject

Art Unit: 2861

matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(I)(1) and § 706.02(I)(2). Longitudinally extending electrical conductors are discussed in this claim so as to provide electric power from the power supply to the at least two electrical connectors (PCBs 108 and 110).

The device of Silverbrook DIFFERS from claim 4 in that it does not teach:
a plurality of longitudinally extending electrical conductors arranged to provide the power from the power supply to the at least two electrical connectors.

Silverbrook teaches the power connection port (66, fig. 9, see col. 12, lines 3-4).

Therefore it would have been an obvious matter that conductors in some type of configurations must be provided from the power connection to the electrical connectors such that parts disposed on the electrical connectors required electricity will function appropriately once the electrically power is supplied to them.

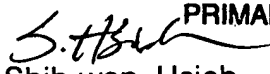
Response to Arguments

6. Terminal disclaimer has been received and being reviewed as proper. However, based on an up-to-date search, an art rejection is given to this application in this office action. This case still can not be issued at this time until the art rejection set forth in this office action be overcome.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shih-wen Hsieh whose telephone number is 571-272-2256. The examiner can normally be reached on 7:30AM -5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, V. Patel can be reached on 571-272-2458. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SHIH-WEN HSIEH
PRIMARY EXAMINER

Shih-wen Hsieh
Primary Examiner
Art Unit 2861

Application/Control Number: 10/760,235
Art Unit: 2861

Page 8

SWH

A handwritten signature in black ink, appearing to be 'SWH' with a long horizontal stroke extending to the right.

Aug. 15, 2006